

#### ABSTRACT OF THE DISCLOSURE

The semiconductor device comprises a gate insulating film including a first dielectric film of  $\text{Hf}_x\text{Al}_{1-x}\text{O}_y$  ( $0.7 < x < 1$ ) formed over a semiconductor substrate, and a second dielectric film different from the first dielectric film formed over the first dielectric film; and a gate electrode formed over the gate insulating film and including a polycrystalline silicon film, whereby the local abnormal growth of the polycrystalline silicon film in the process of forming the polycrystalline silicon film is prevented, and the gate leakage current can be much decreased.